

# EP-200 Series Pump



## Installation, Operation & Service Manual

### **⚠ WARNING**

**Improper installation, adjustment, alteration, service or maintenance can result in death, injury or property damage. Read the installation, operation and service manual thoroughly before installing or servicing this equipment.**

**Installation must be done by a contractor qualified in the installation and service of gas-fired heating equipment or your gas supplier.**

#### **Installer**

Please take the time to read and understand these instructions prior to any installation. Installer must give a copy of this manual to the owner.

#### **Owner**

Keep this manual in a safe place in order to provide your serviceman with necessary information.



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## SECTION 1: HEATING SYSTEM SAFETY



Your Safety is Important to Us!

This symbol is used throughout the manual to notify you of possible fire, electrical or burn hazards. Please pay special attention when reading and following the warnings in these sections.

Installation, Service and Annual Inspection of heater and pump must be done by a contractor qualified in the installation and service of gas-fired heating equipment.

Read this manual carefully before installation, operation or service of this equipment.

This heating system is designed for heating nonresidential indoor spaces. Do not install in residential spaces. These instructions, the layout drawing, local codes and ordinances, and applicable standards that apply to electrical wiring, venting, etc., must be thoroughly understood before proceeding with the installation.

Thin sheet metal parts, such as the various venting components, have sharp edges. To prevent injury, the use of work gloves is recommended.

Do not attempt to operate the pump until all steps of the installation have been accomplished.

### 1.1 Manpower Requirements

To prevent personal injury and damage to the pump, two persons will be required for installation.

## SECTION 2: INSTALLER RESPONSIBILITY

The installer is responsible for the following:

- To install the pump and electrical supplies, in accordance with applicable specifications and codes. Roberts-Gordon recommends the installer contact a local building inspector or Fire Marshal for guidance.
- To use the information given in a layout drawing and in the manual together with the cited codes and regulations to perform the installation.
- To furnish all needed materials not furnished as standard equipment.
- To plan location of supports.
- To provide access to pump for servicing on all sides and for pump removal.
- To provide the owner with a copy of this installation, operation and service manual.
- To never use pump or pump platform as support for ladder or other access equipment and never hang or suspend anything from pump or pump platform.
- To safely and adequately install pump using materials with a minimal working load of 400 lb (181 kg).

### 2.1 Corrosive Chemicals

#### ⚠ CAUTION

**Do not use heater and pump in an area containing corrosive chemicals.**

**Avoid the use of corrosive chemicals to ensure a longer life of the pump, burner, tubing and other parts.**

**Failure to follow these instructions can result in property damage.**

Roberts-Gordon cannot be responsible for ensuring that all appropriate safety measures are undertaken prior to installation; this is entirely the responsibility of the installer. It is essential that the contractor, the sub-contractor, or the owner identifies the presence of combustible materials, corrosive chemicals or halogenated hydrocarbons\* anywhere in the premises.

*\* Halogenated Hydrocarbons are a family of chemical compounds characterized by the presence of halogen elements (fluorine, chlorine, bromine, etc.). These compounds are frequently used in refrigerants, cleaning agents, solvents, etc. If these compounds enter the air supply of the burner, the life span of the heater components will be greatly reduced. An outside air supply must be provided to the burners whenever the presence*

*of these compounds is suspected. Warranty will be invalid if the heater is exposed to halogenated hydrocarbons.*


### 2.2 National Standards and Applicable Codes

All Appliances must be installed in accordance with the latest revision of the applicable standards and national codes. This refers also to the electric, gas and venting installation. Note: Additional standards for installations in Public Garages, Aircraft Hangars, etc. may be applicable.

## SECTION 3: UNPACKING THE PUMP

### 3.1 Open Shipping Cartons

Open cartons and remove packing inserts. Carefully remove pump components from the cartons. Lift assembly by gripping metal pump frame. Two people are required (weight 112 lb, 51 kg). This pump has been tested prior to packing. The impeller was dynamically balanced before assembly and requires care in handling to avoid damage.

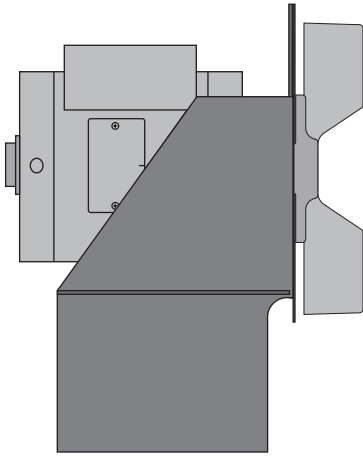
<b>⚠ WARNING</b>

<b>Severe Injury Hazard</b>
<b>Install pump scroll and inlet assembly before operating high speed rotating impeller.</b>
<b>Keep hands, fingers and clothing away from inlet and outlet.</b>
<b>Install and operate equipment according to installation manual.</b>
<b>Failure to follow these instructions can result in death or severe injury.</b>



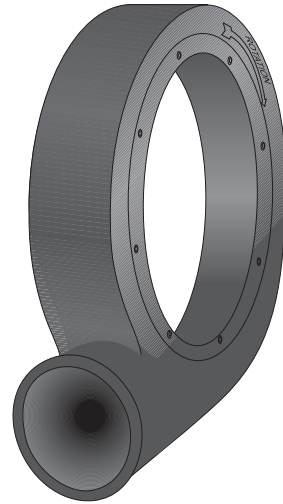
**SECTION 4: MAJOR COMPONENTS**

**FIGURE 1: Major Component Descriptions**

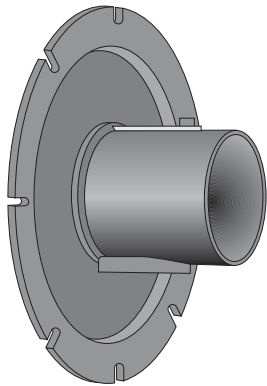
**EP-201 Pump Assembly - 01312001**  
**EP-203 Pump Assembly - 01312002**



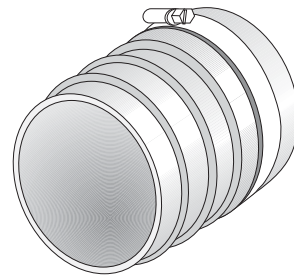
**Pump Scroll Assembly - 01394400**



**Inlet Plate Assembly - 01327400**



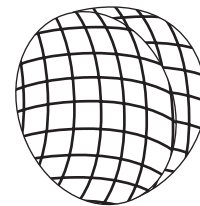
**Pump Boot 4" (10 cm) - 91412800**



**Band Clamp 4" (10 cm) - 91901300**



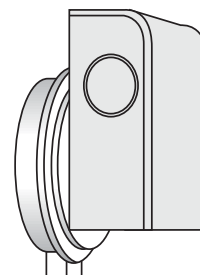
**Bird Screen 4" (10 cm) - 01365400**



**Mounting Angle - 01365000**



**Pressure Switch - 90430600**



## 4.1 Standard Parts List

**Table 1: EP-201 Pump Package (P/N 02716305)**

<b>Part No.</b>	<b>Description</b>	<b>Quantity</b>
	Box 1 of 2	
01312001	EP-201 Pump Assembly	1
127102NA	CORAYVAC® Installation, Operation and Service Manual	1
	Box 2 of 2	
<b>01311700</b>	<b>EP-200 Series Accessory Package</b>	<b>1</b>
91901300	Band Clamp, 4"	4
92113900	Hex Nut	6
93413912	Bolt (5/16" -18" x 3/4")	6
94273914	Bolt (5/16" -18" x 7/8")	16
95211600	Flat Washer (5/16")	28
96411600	Lockwasher (5/16")	6
01327400	Inlet Plate Assembly	1
01365400	Bird Screen, 4"	1
01365000	Mounting Angle	6
01394400	Pump Scroll	1
02757500	Motor Shaft Seal	1
90430600	Pressure Switch	1
91406940	Pump Gaskets	4
91412801	Pump Boot	2
91906900	Silicone Rubber Ring	2
127200NA	EP-200 Series Installation, Operation and Service Manual	1

**Table 2: EP-203 Pump Package (P/N 02712034)**

<b>Part No.</b>	<b>Description</b>	<b>Quantity</b>
	Box 1 of 2	
01312002	EP-203 Pump Assembly	1
127102NA	CORAYVAC® Installation, Operation and Service Manual	1
	Box 2 of 2	
<b>01311700</b>	<b>EP-200 Series Accessory Package</b>	<b>1</b>
91901300	Band Clamp, 4"	4
92113900	Hex Nut	6
93413912	Bolt (5/16" -18" x 3/4")	6
94273914	Bolt (5/16" -18" x 7/8")	16
95211600	Flat Washer (5/16")	28
96411600	Lockwasher (5/16")	6
01327400	Inlet Plate Assembly	1
01365400	Bird Screen, 4"	1
01365000	Mounting Angle	6
01394400	Pump Scroll	1
02757500	Motor Shaft Seal	1
90430600	Pressure Switch	1
91406940	Pump Gaskets	4
91412801	Pump Boot	2
91906900	Silicone Rubber Ring	2
127200NA	EP-200 Series Installation, Operation and Service Manual	1

## SECTION 5: PUMP INSTALLATION

### 5.1 Pump Assembly Instructions

#### 5.1.1 Determine Orientation of Pump Discharge

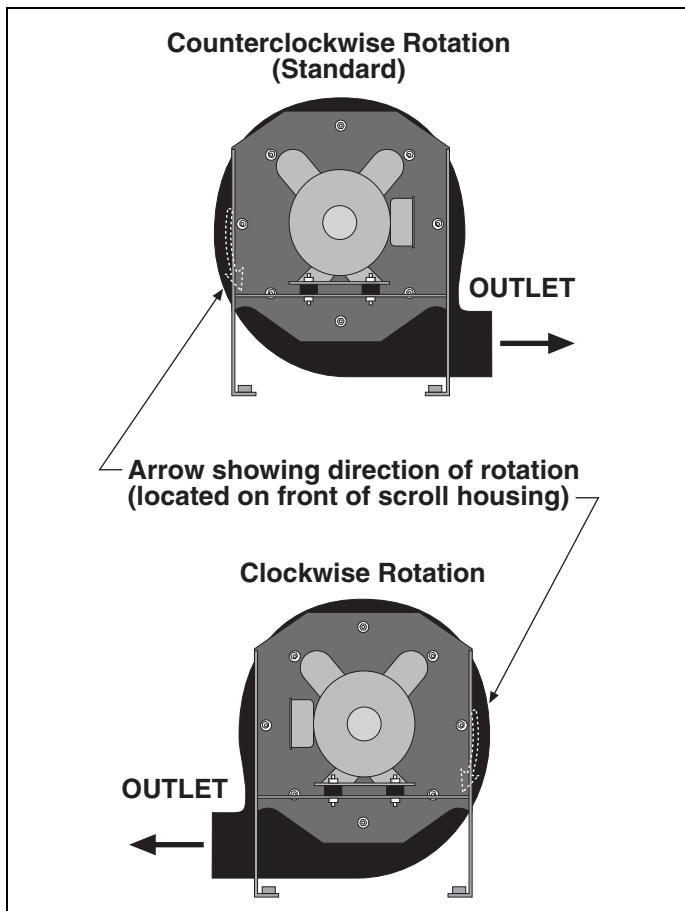
To ensure your safety, and comply with the terms of the warranty, all units must be installed in accordance with these instructions.

The pump must be installed in a location that it is readily accessible for servicing.

An arrow is affixed to the outside of the pump scroll to indicate the direction of rotation of the impeller. The standard rotation of the impeller is in the counterclockwise direction.

Pump discharge orientation and impeller rotation direction is viewed from the rear of the motor as shown in *on Page 6, Figure 2*. Note that the pump scroll outlet must always be positioned at the bottom horizontal position.

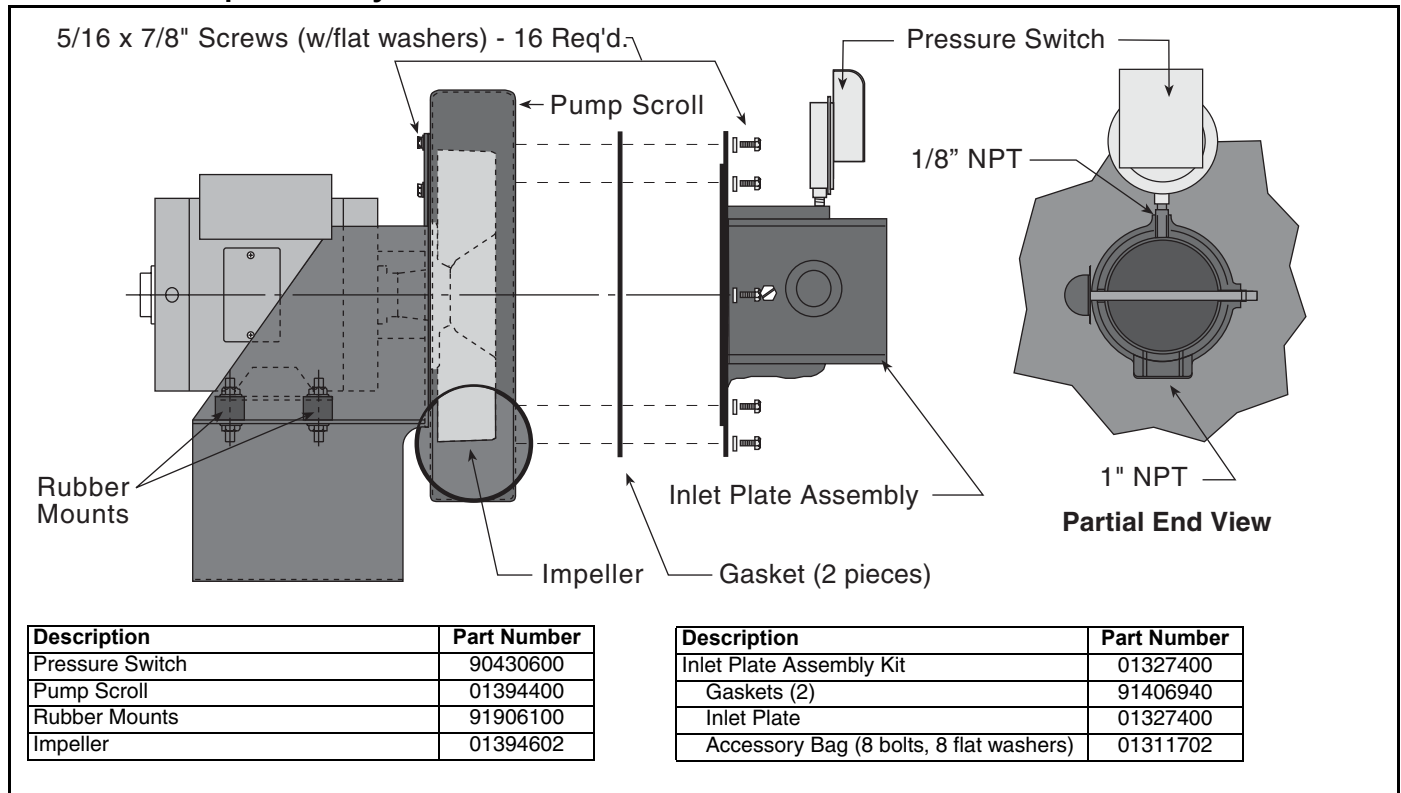
**FIGURE 2: Pump Discharge Orientation / Impeller Rotation Direction**



#### 5.1.2 Attaching Pump Scroll

After determining the correct orientation of the pump scroll outlet, attach the pump scroll to the pump frame as follows:

- Place Flat Washer (P/N 95211600), on the 5/16" x 7/8" Screw (P/N 94273914).
- From the motor side of the vertical mounting plate of the pump frame, insert the 5/16" x 7/8" screws.
- Install two pieces of the gasket material on the exposed thread ends of the mounting screws. Make sure the ends of the opposing gasket segments interlock to form a complete circular gasket.
- Carefully position the pump scroll against the vertical mounting plate of the pump frame; align and loosely install the 5/16" x 7/8" screws into the corresponding mounting holes in the pump scroll.
- While tightening the screws that secure the pump scroll to the motor frame, periodically spin the impeller to be sure that adequate clearance is maintained between the impeller blades and the body of the pump scroll.

**FIGURE 3: Pump Assembly**

### 5.1.3 Attaching the Inlet Plate Assembly

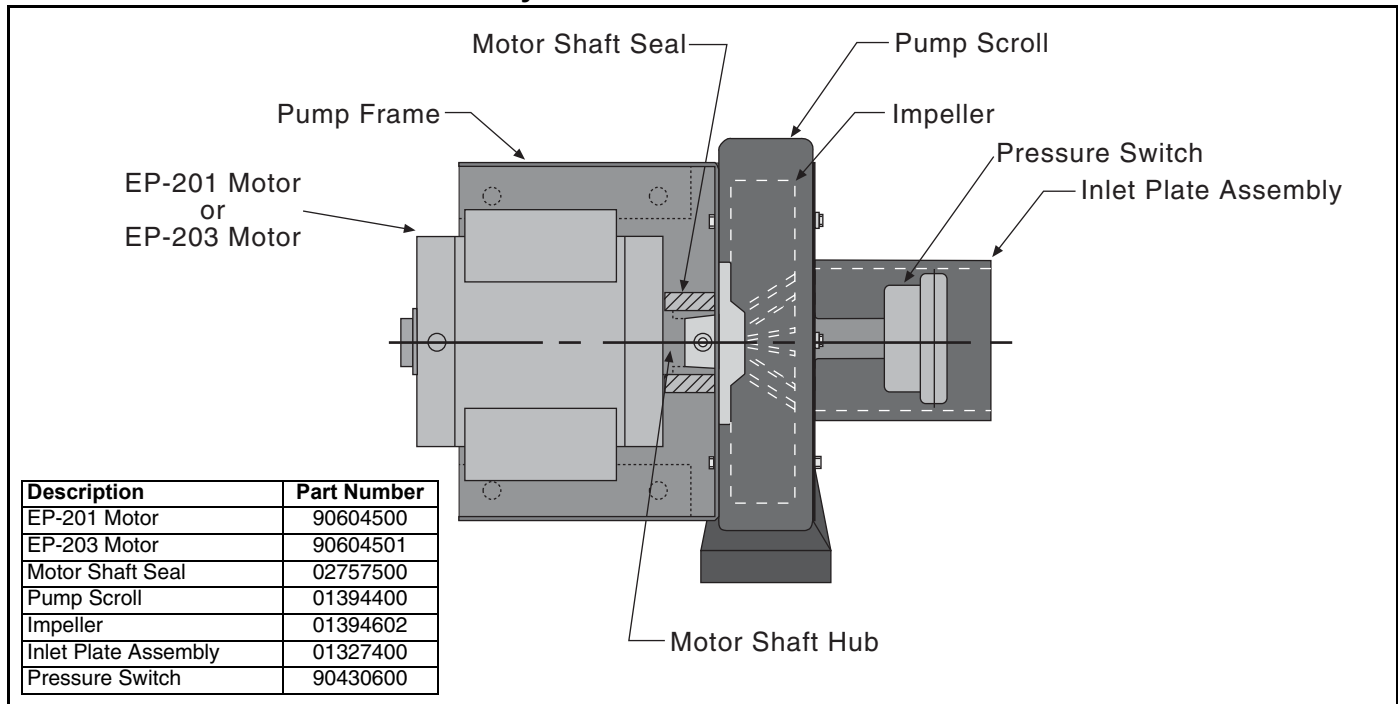
Following installation of the pump scroll to the pump frame, attach the inlet plate assembly to the pump scroll as follows:

- Place flat washer on the 5/16" x 7/8" screw.
- Position a single section of the gasket against the face of the pump scroll; align the clearance holes of the gasket with the mounting holes of the pump scroll. Loosely install one 5/16" x 7/8" screw through the gasket segment and into the top center mounting hole of the pump scroll to support the gasket.
- Interlock the remaining gasket segment to the previously installed gasket segment to complete the circular gasket.
- Orient the inlet plate assembly as shown. The 1/8" NPT plug should face directly up, and the 1" NPT plug should face directly downward. Carefully position the top center mounting notch of the inlet plate assembly to engage the mounting screw positioned previously.
- Install the seven remaining 5/16" x 7/8" screws through the notches in the inlet plate assembly

and into the corresponding mounting holes in the pump scroll.

- Tighten screws to complete installation of the inlet plate assembly.
- Install pressure switch in 1/8" NPT hole in top of outlet.


**FIGURE 4: Motor Shaft Seal Assembly**



**5.1.4 Install Motor Shaft Seal**

- Separate the motor shaft seal at the pre-cut score line.
- Wrap the shaft seal around the motor shaft hub as shown on Page 8, Figure 4.
- Secure the shaft seal in position with the adhesive strip provided.

## 5.2 Pump Suspension

<b>! WARNING</b>	
	<b>Suspension Hazard</b>
	Mount pump with materials with a minimum working load of 400 lbs (181 kg).
	Failure of the supports can result in death, injury or property damage.

The standard method of mounting the EP-200 pump is on an outside wall and venting directly through the wall.

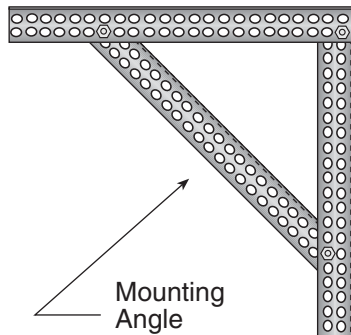
The pump may be mounted by using mounting angles as shown in *Figure 5*. The two mounting angles form a mounting platform to which the pump will be attached.

Attach the mounting frame to the wall using anchors. Select an anchor that will give equal to or greater than 2000 lb ultimate pull-out strength.

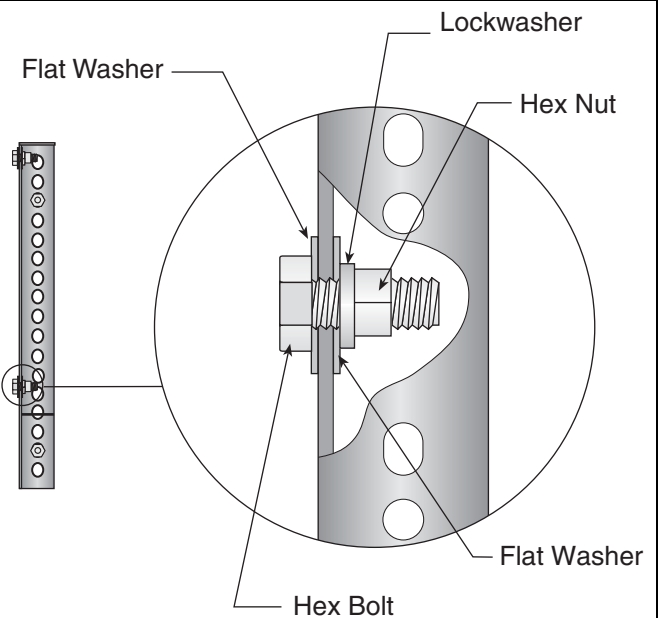
### 5.2.1 Wall Mounting Angle Assembly

**FIGURE 5: Wall Bracket Assembly**

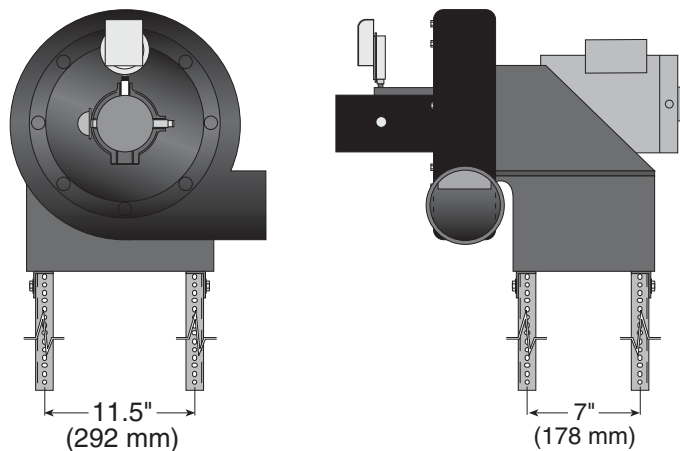
**NOTE:** Typical assembly shown. Two (2) assemblies per each pump required.



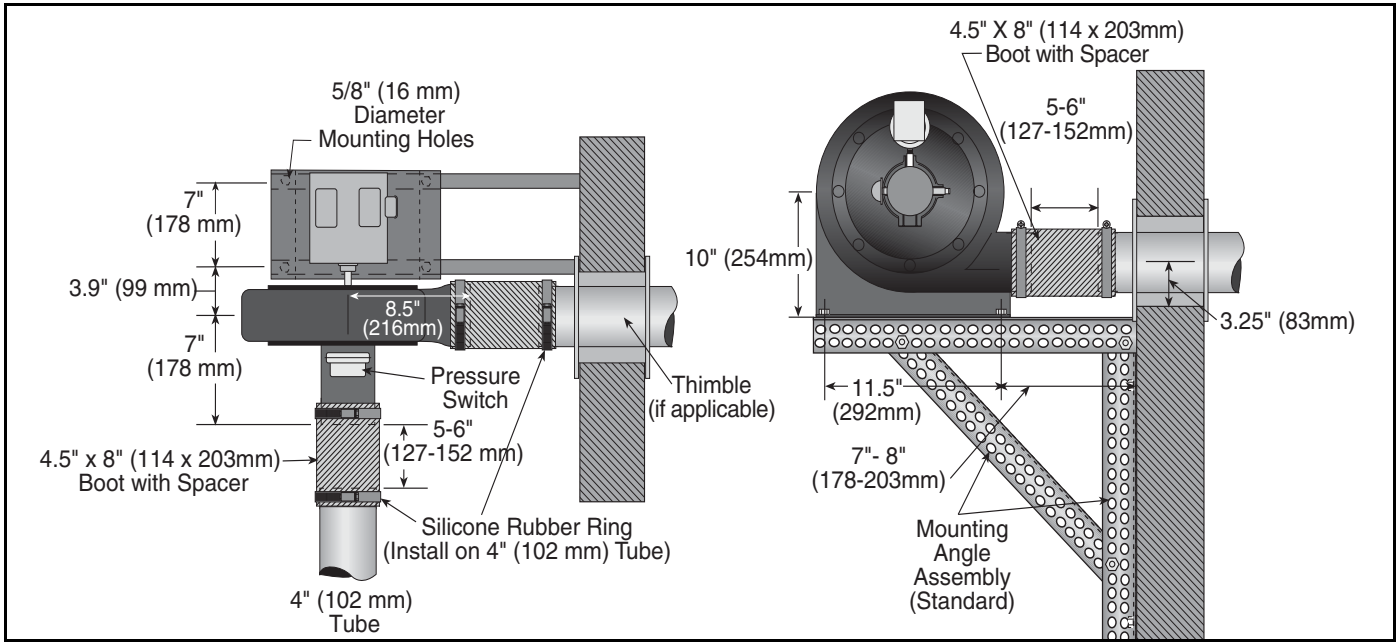
Description	Part Number
Mounting Angle	01365000
Hex Bolt 5/16" x 3/4"	93413912
Flat Washer	95211600
Lockwasher	96411600
Hex Nut	92113900



**FIGURE 6: Wall Mounting Angle Assembly**



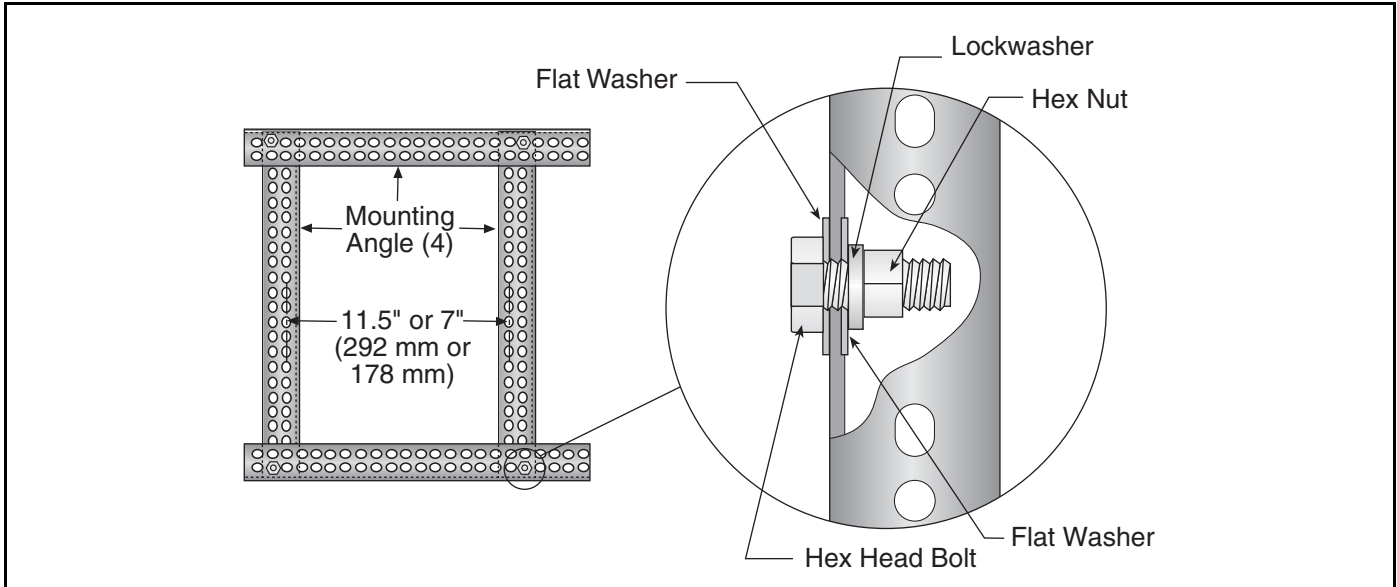
**FIGURE 7: Wall Mounting**



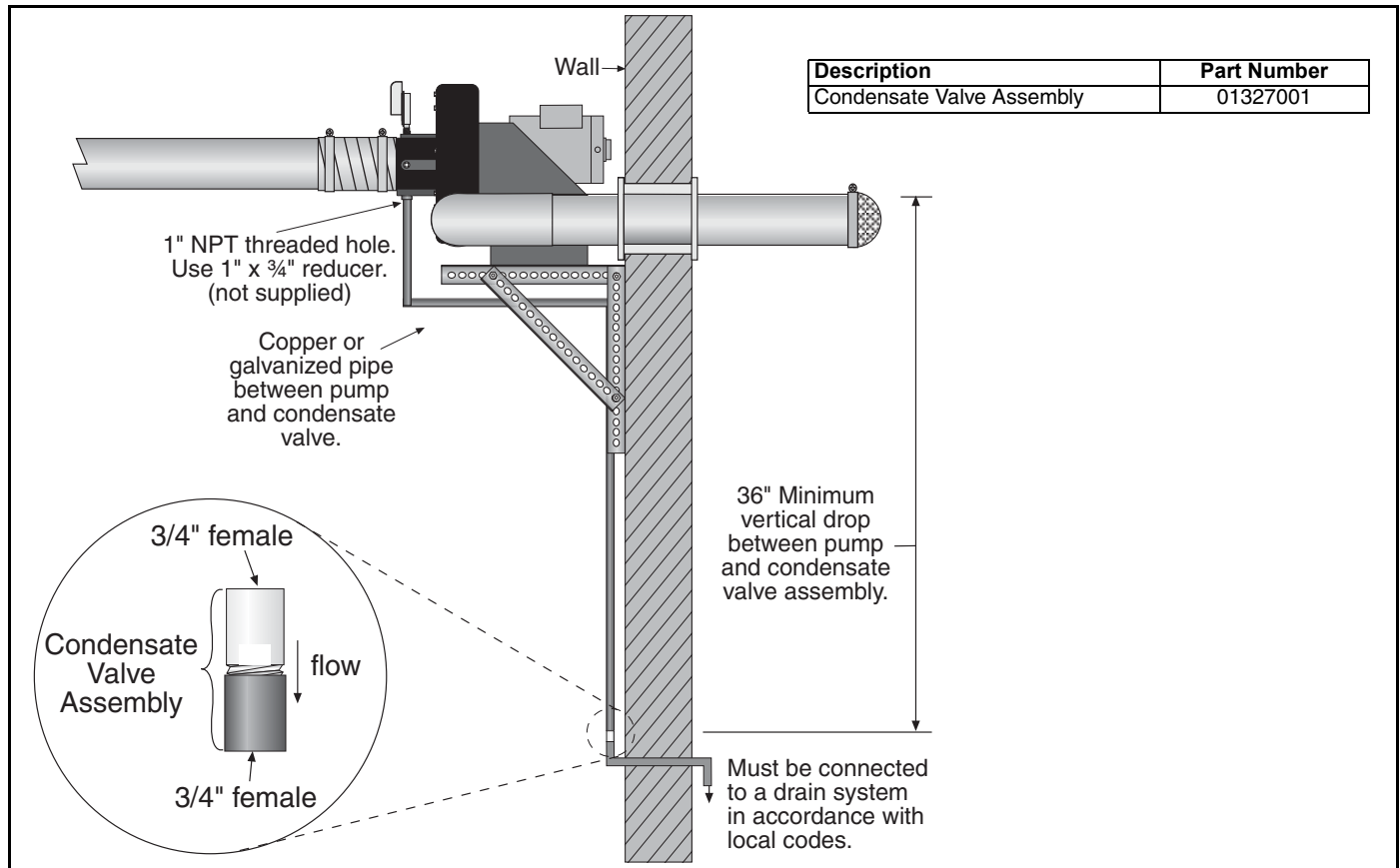
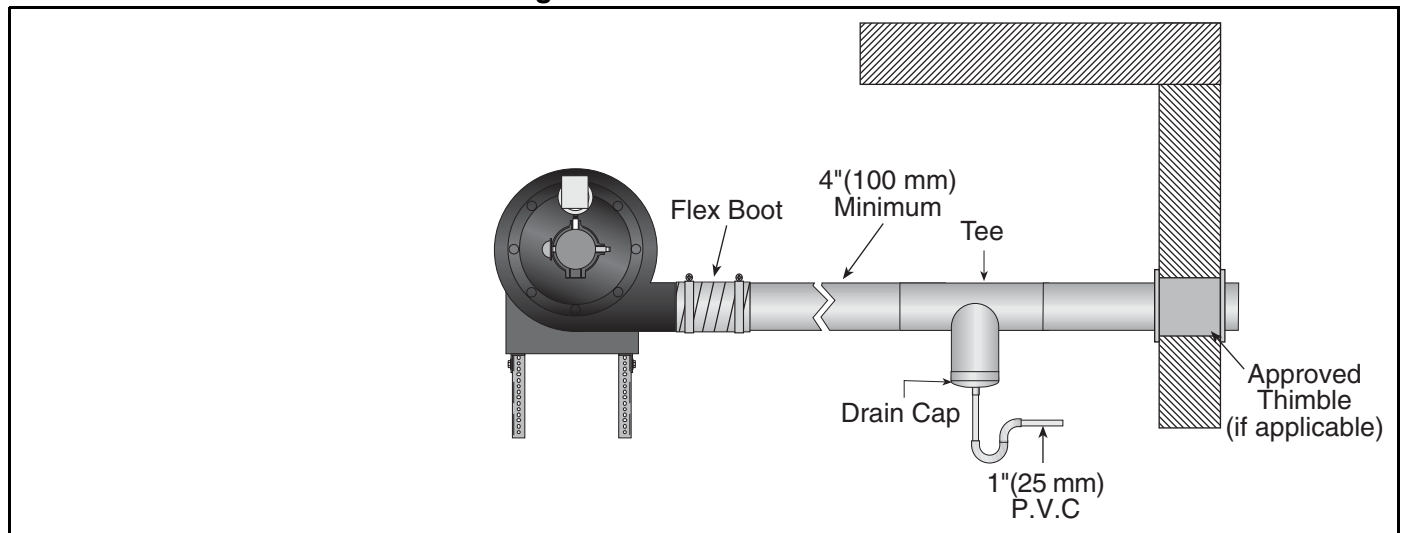
**5.2.2 Mounting Platform (Optional Platform Assembly)**

If mounting on an outside wall is not practical, it may be mounted on a platform suspended from the ceiling, or for noise reduction, in an enclosure.

**FIGURE 8: Mounting Platform Assembly**





**FIGURE 9: Condensate Check Valve****FIGURE 10: Condensate Tee - Discharge Side****5.3 Condensate Trap and Condensate Tee**

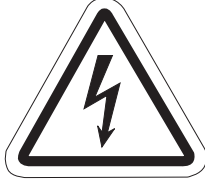
The condensate trap assembly (optional) (P/N 01327001), should be installed on the inlet side of the EP-200 Series pump assembly, See Page 11, Figure 9.

It is possible to eliminate the condensate trap assembly on the pump if the one-inch threaded hole is plugged. This arrangement will permit drainage of condensate through the pump and outside via horizontal (pitched) discharge line.

The condensate trap assembly in the discharge line can be eliminated if the discharge line is horizontal through the wall and pitched down at least one inch per foot. A condensate trap on the discharge side is required if there is a vertical rise in the discharge line.

**SECTION 6: MOTOR WIRING**

**⚠ WARNING**



**Electrical Shock Hazard**

**Disconnect electrical power and gas supply before servicing.**

**This appliance must be connected to a properly grounded electrical source.**

**Failure to follow these instructions can result in death or electrical shock.**

**6.1 Prior to Operation**

Prior to operation of the pump in the heating system, operation and proper rotation of the impeller must be verified.

**IMPORTANT:** Improper rotation of the impeller will not produce the vacuum required for proper system operation.

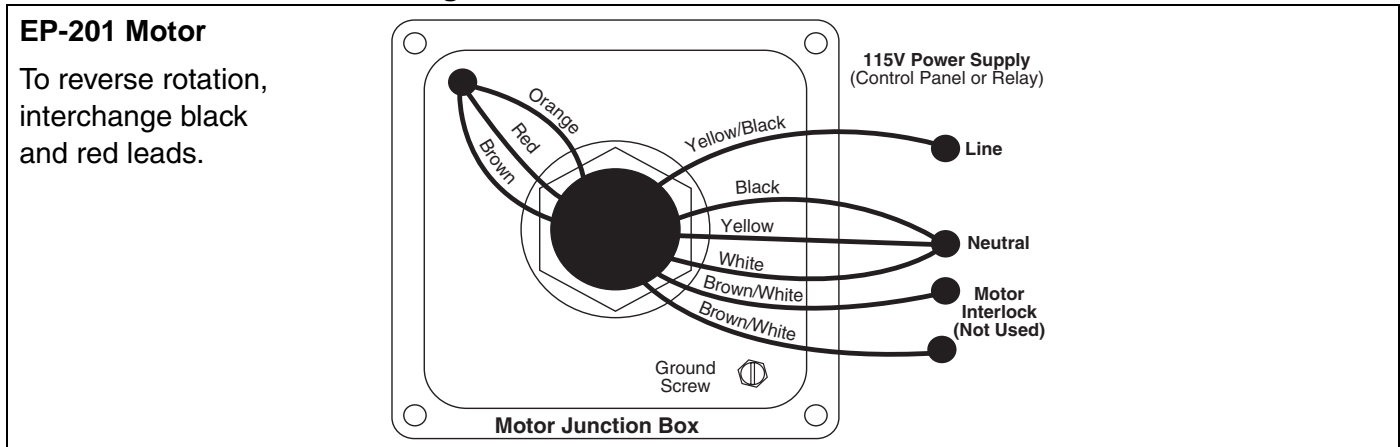
The EP-201 motor must be wired for clockwise or counterclockwise rotation as shown on Page 12, Figure 11.

The EP-201 motor is wired for 1 Ø, 120 V, 60 Hz operation. The EP-201 motor can be rewired for 230 V operation by changing the motor connections as indicated by the diagram on the motor connection box cover.

Wire the pressure switch per the CORAYVAC® (P/N 127102NA), VANTAGE® EV (P/N 151100NA) or appropriate controller installation manual.

All wiring must comply with current wiring regulations and any local regulations which may apply. Always switch off the supply and disconnect before servicing.

**FIGURE 11: EP-201 Motor Wiring**

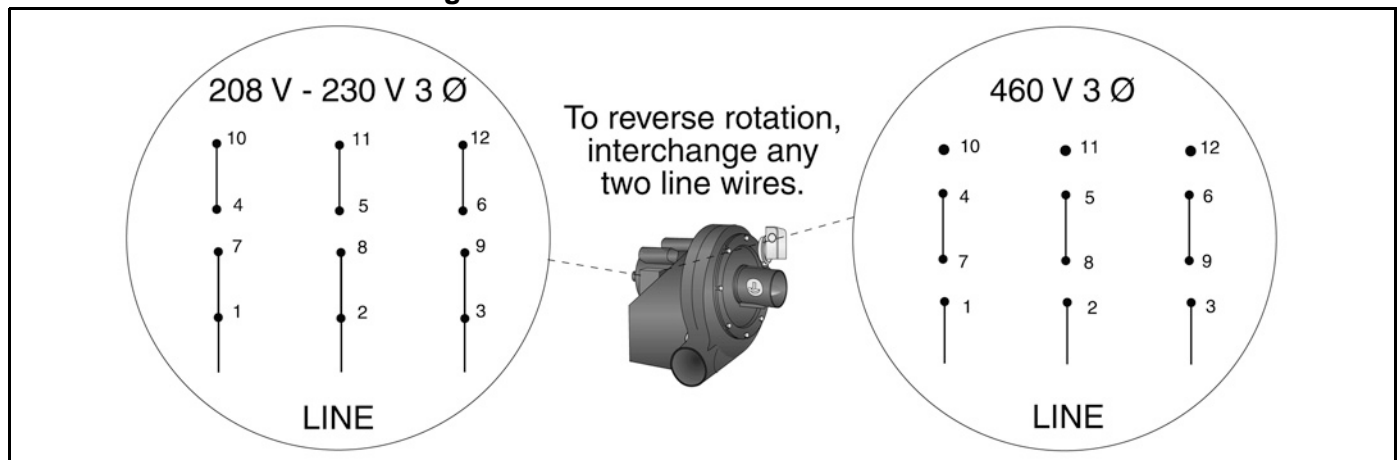


The EP-203 motor can be wired for 3 Ø, 208 V - 230 V, 60 Hz or 3 Ø, 460 V, 60 Hz operation.



The EP-203 motor rotation direction can be changed by interchanging any two leads.

Wire the pressure switch per the CORAYVAC® (P/N 127102NA), VANTAGE® EV (P/N 151100NA) or appropriate controller installation manual.

**FIGURE 12: EP-203 Motor Wiring**



## SECTION 7: VENTING

 <b>WARNING</b>	
	<p><b>Carbon Monoxide Hazard</b> Pump must be vented to the outside.</p> <p>Heaters must be installed according to the installation manual.</p> <p>Failure to follow these instructions can result in death or injury.</p>

### 7.1 General Venting Requirements

Install the venting in accordance with the requirements within this manual and the National Fuel Gas Code, ANSI Z223.1/NFPA-54 - latest revision and CSA 22.1 - latest revision. This section provides partial information about this specification with regard to size and configuration for venting requirements (see following figures). However, to provide assurance of proper and safe operation, it is the responsibility of the installer to make sure the installation is in strict accordance with all local and national codes.

### 7.2 Venting the Pump

- The exhaust connection from the pump is 4.5" (11 cm) diameter.
- Connect one of the flexible isolation boots provided to the 4" (10 cm) flue pipe, using the silicone rubber ring provided.
- Connections to flue pipe larger than 4" (10 cm) require use of an appropriate "taper pattern reducer" (not supplied).
- Venting from the pump may discharge either horizontally or vertically. **Horizontal discharge is preferred.** See Page 14, Figure 13. Vertical discharge must be arranged as shown on Page 15, Figure 14. Corrosion resistant pipe is required.
- Both horizontal and vertical venting must be supported by suitable hangers.
- Vent lengths are allowed as follows:

VENT LENGTH	VENT SIZE
Up To 10' (3 m)	4" (10 cm) vent - 1 elbow
Up To 25' (8 m)	5" (12.5 cm) vent - 3 elbow
Up To 50' (15 m)	6" (15 cm) vent - 3 elbow

### 7.3 Horizontal Venting

The vent material must be either porcelain coated tubing 4" (10 cm) O.D. (P/N 9141030D), heat treated aluminized tubing 4" (10 cm) O.D. (P/N 91409408), heat treated aluminized tubing 6" (15 cm) O.D. (P/N E0009105) or single wall flue pipe minimum 26 Ga. Vent length be limited to less than 30' (9 m). If using vent lengths greater than 30' (9 m), condensation will form in the vent pipe. Insulation and additional sealing measures will be required.

#### 7.3.1 Horizontal Venting Guidelines

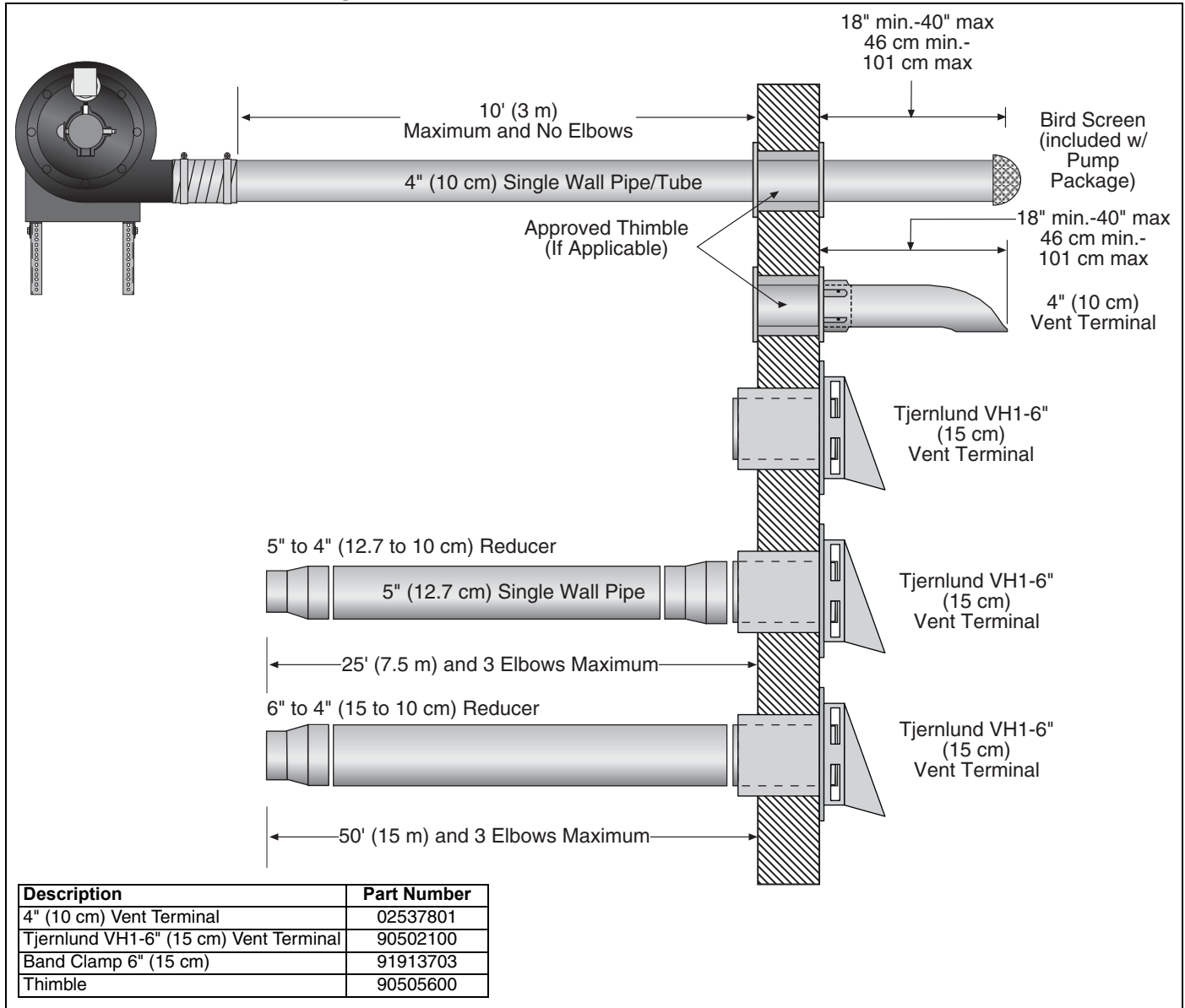
- Vent must exit building not less than 7' (2 m) above grade when located adjacent to public walkways.
- Vent must terminate at least 3' (1 m) above any forced air inlet located within 10' (3 m).
- Vent must terminate at least 4' (1.2 m) below 4' (1.2 m) horizontally from or 12" (30 cm) above any door, window or gravity air inlet into building.
- Locate vent terminal at least 12" (30 cm) from any opening through which vent gases could enter a building.
- Use only corrosion resistant materials for the discharge line from the pump to the point of discharge.
- Vent terminal opening must extend beyond any combustible overhang.
- Install vent terminal at a height sufficient to prevent blockage by snow.
- Protect building materials from degradation by flue gases.
- Any portion of flue pipe passing through a combustible wall must be dual insulated and an approved thimble must be used.

#### 7.3.2 Side Wall Venting

Vent recommendations in order of preferred use:

1. Porcelain coated tubing 4" (10 cm) O.D. (P/N 9141030D)
2. Heat treated aluminized tubing 4" (10 cm) O.D. (P/N 91409408)  
Heat treated aluminized tubing 6" (15 cm) O.D. (P/N E0009105)
3. Single wall flue pipe - minimum 26 ga.

**FIGURE 13: Side Wall Venting**

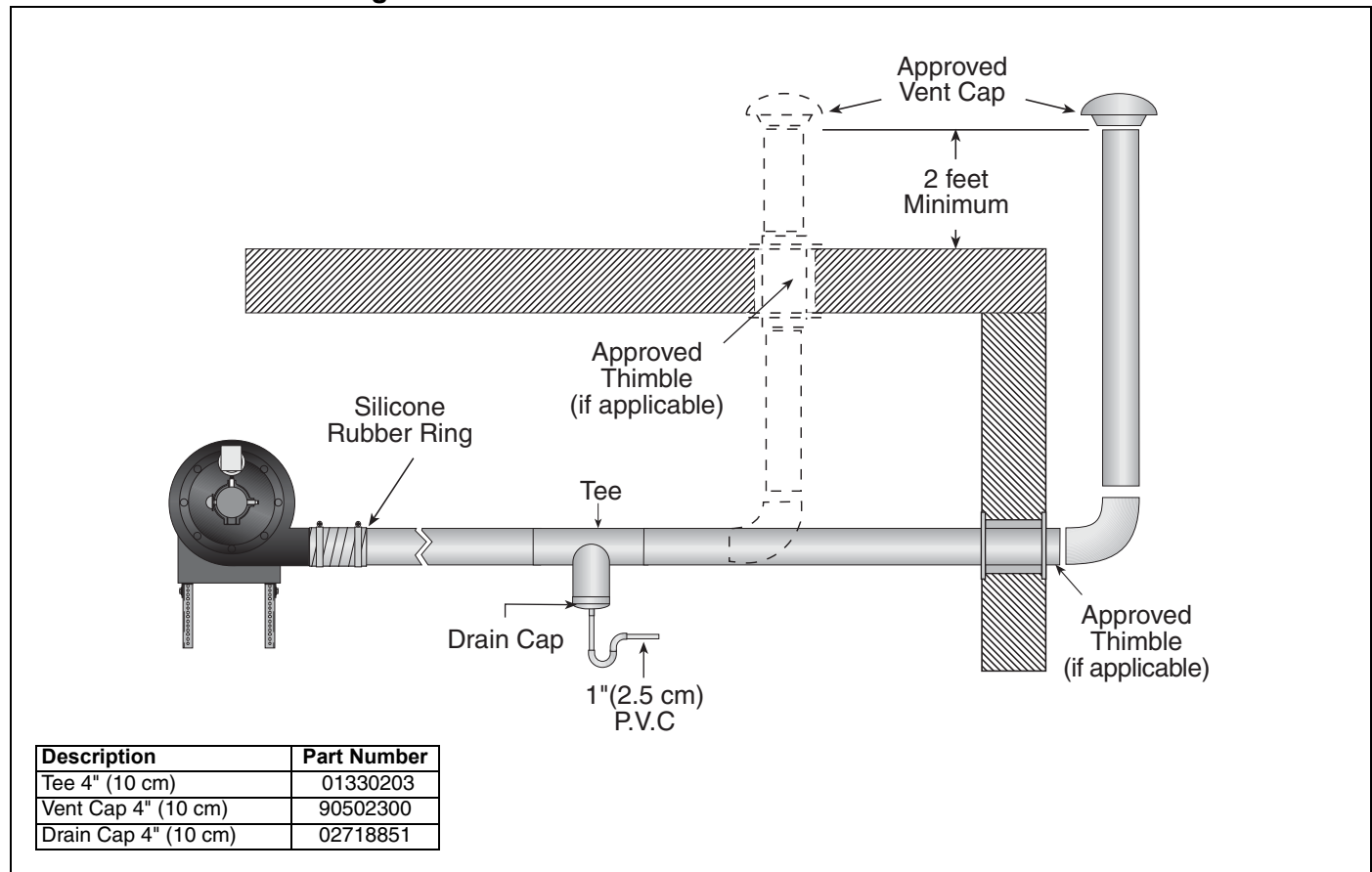


## 7.4 Vertical Venting

The vent material must be either porcelain coated tubing 4" (10 cm) O.D. (P/N 9141030D), heat treated aluminized tubing 4" (10 cm) O.D. (P/N 91409408), heat treated aluminized tubing 6" (15 cm) O.D. (P/N E0009105) or single wall flue pipe minimum 26 Ga.

Condensation will form in the vent pipe. Insulation and additional sealing measures may be required. Length of flue pipe is equal to total of vertical and horizontal length.

**FIGURE 14: Vertical Venting**



**SECTION 8: SERVICING INSTRUCTIONS****⚠ WARNING****Severe Injury Hazard**

**Install pump scroll and inlet assembly before operating high speed rotating impeller.**

**Keep hands, fingers and clothing away from inlet and outlet.**

**Install and operate equipment according to installation manual.**

**Failure to follow these instructions can result in death or severe injury.**

**⚠ WARNING****Electrical Shock Hazard**

**Disconnect electrical power and gas supply before servicing.**

**This appliance must be connected to a properly grounded electrical source.**

**Failure to follow these instructions can result in death or electrical shock.**

Disassembly and removal or replacement of any pump components must be done by a service contractor or electrician qualified in the installation and service of gas-fired heating equipment.

Overtorquing can result in a failure of components.

Failure to follow these instructions can compromise pump operation and void warranty.

**8.1 Pre-Season Maintenance and Annual Inspection**

To ensure your safety and years of trouble-free operation of the pump, service and annual inspections must be done by a contractor qualified in the installation and service of gas-fired heating equipment.

Disconnect electric and gas supplies before performing service or maintenance.

Before every heating season, a contractor qualified in the installation and service of gas-fired heating equipment must perform a thorough safety inspection of the pump.

For safety and best performance, the electrical, venting, suspensions and overall pump condition are some of the areas requiring inspection.

Please see *Page 17, Section 8.3* for suggested items to inspect.

**8.2 To Change the Motor and/or the Impeller**

1. To remove the motor or impeller, the scroll must be opened. Remove the (8) nuts/bolts and insert a knife blade between the scroll halves to cut through the factory applied sealant. Separate the two halves.
2. The impeller can be removed by loosening the (2) 3/8-24 set screws, removing the 10-32 screw and retainer assembly. With an appropriate wheel puller, remove the impeller.
3. The motor can now be removed, if necessary, by loosening the attachment hardware.
4. Re-assembly of motor/impeller combination require proper alignment. Make sure the impeller has a 1/4" (6 mm) clearance off the inside wall of the scroll. Verify proper motor alignment and free rotation.
5. The (2) impeller set screws should be removed and reinstalled with a drop of thread locking sealant and remain unseated during initial re-assembly.
6. Slide the impeller onto the motor shaft end. Apply a drop of thread locking sealant to the threads of the retainer screw/washer assembly. Insert the retainer screw into the shaft so that it bottoms on the end of the shaft and hub of the impeller. Torque to 30 in/lb.
7. Seat the (2) impeller set screws. Torque to 100 in/lbs.
8. Re-attach the scroll halves. Apply a bead of high temperature silicone sealant (600°F) to the scroll halves. Secure with all (7) nuts/bolts. Torque to 150 in/lb.

### 8.3 Maintenance Checklist

**Installation, Service and Annual Inspection of the pump must be done by a contractor qualified in the installation and service of gas-fired heating equipment.**

**Turn off the system and ensure power and gas supply is shut off before servicing equipment.**

**Read this manual carefully before installation, operation, or service of this equipment.**

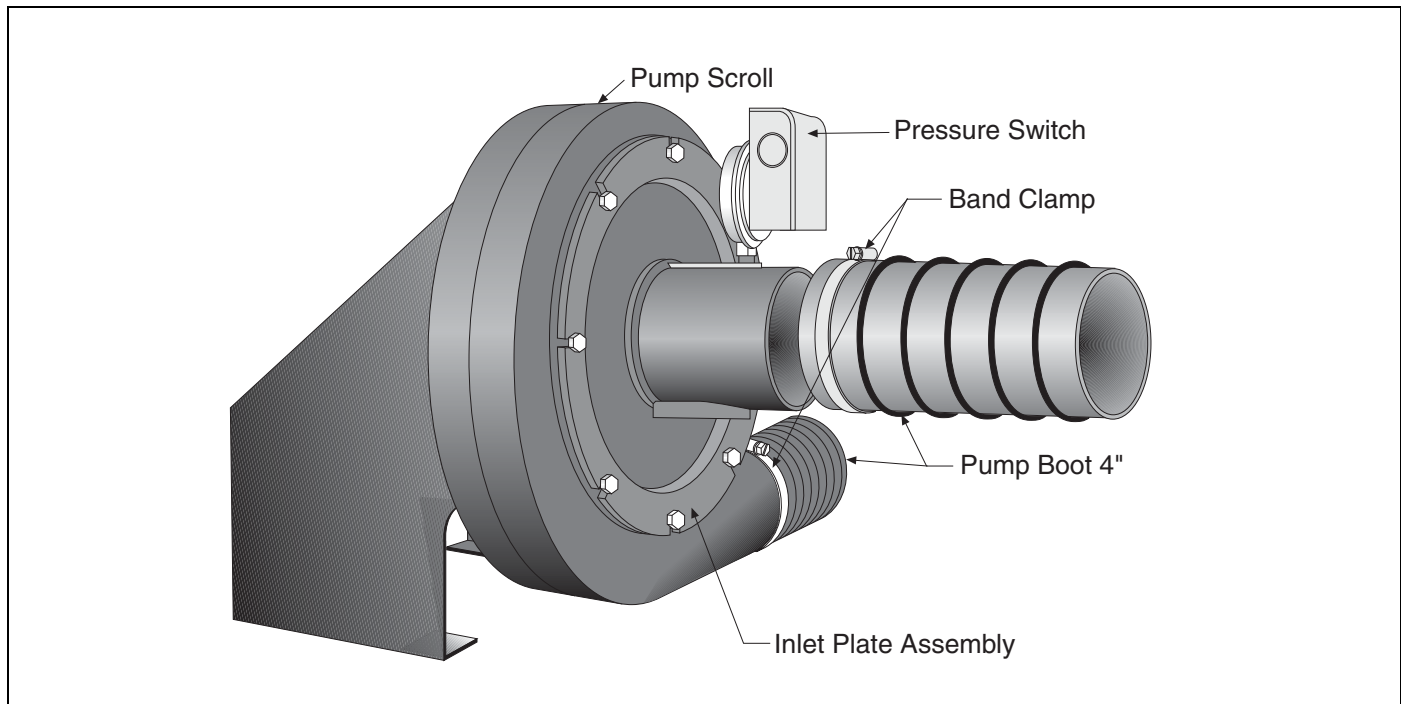
<b>System Tubing and Vent Pipe</b>	<p>Venting must be intact. Using a flashlight, look for obstructions, cracks on the pipe, gaps in the sealed areas or corrosion.</p> <p>The area must be free of dirt and dust or blockage.</p> <p>Remove any carbon deposits or scale using a wire brush.</p> <p>Replace pipe if there are any holes due to corrosion. Seal any gaps in venting to prevent condensate leakage.</p>
<b>Pump Scroll, Impeller and Motor</b>	<p>Compressed air or a vacuum cleaner may be used to clean dust and dirt.</p> <p>Check for corrosion, if any parts have corroded through, replace as necessary.</p> <p>Ensure all hex nuts are tight for proper seal.</p>
<b>Suspension Points</b>	<p>Make sure the pump is hanging securely.</p> <p>Look for signs of wear on the mounting angles, wall mounting points or ceiling mounting points.</p>
<b>Pump Boot</b>	<p>Inspect pump boot at pump inlet and outlet for cracking or deterioration.</p> <p>Replace if cracks are found.</p> <p>Ensure band clamps are tight at all connection points.</p>
<b>Condensate Trap, Drain Cap</b>	<p>Check connection of tee to drain cap and between tee and condensate trap.</p> <p>Seal connections between tee and drain cap to prevent condensate leakage.</p> <p>Screw condensate trap tightly into drain cap or pump inlet assembly to prevent leakage.</p> <p>Condensate trap should be filled with water.</p>
<b>Pressure Switch</b>	<p>Ensure that wiring is intact.</p>

## SECTION 9: REPLACEMENT PARTS AND ACCESSORIES

Use only genuine ROBERTS GORDON® replacement parts.

Use of parts not specified by Roberts-Gordon voids warranty.

Failure to follow these instructions can result in property damage.



### 9.1 Replacement Parts

Description	Part Number
EP-201 Motor 3/4 HP, 115 V, 1 Ø	90604500
EP-203 Motor 3/4 HP 208 V - 230 V/ 460 V, 3 Ø	90604501
Impeller	01394602
Boot Replacement Package	02771000
Pressure Switch	90430600
Bird Screen w/ clamp	01312200
Shaft Seal	02757500
Damper Assembly	01331900

Description	Part Number
Rubber Mounts	91906100
Pump Scroll	01394400
4" (10 cm) Pump Boot	91412800
Mounting Angle	01365000
Inlet Plate Assembly Kit	01327401
Gaskets (2)	91406940
Inlet Plate	01327400
Accessory Bag (8 bolts, 8 flat washers)	01311702

### 9.2 Accessories

Description	Part Number
4" Plain Coupling	01312700
6" Plain Coupling	01312706
4" Lined Coupling	01312701
4" Damper Coupling	01331900
4" Aluminized Tee	01330203
6" Aluminized Tee	01330204
4" Coated Tee	0133022D
6" Coated Tee	0133025D
4" Aluminized Cross	01330903
4" Coated Cross	0133092D
4" (10 cm) Band Clamp	91901300
6" (15 cm) Band Clamp	91913703

Description	Part Number
4" Aluminized 90° Elbow	01335801
6" Aluminized 90° Elbow	T0100320
4" Coated 90° Elbow	0133580D
6" Coated 90° Elbow	0133660D
4" Aluminized Non Heat Treated 10' Tube	91409403
6" Aluminized Non Heat Treated 10' Tube	91409420
4" Coated 10' Tube	9141030D
Aluminized Tube adapter (6" dia. x 4" dia.)	91418200
6" Tube Hanger	91240010
4" Drain Cap	02718851
6" Drain Cap	02718852
Condensate Trap	01327001

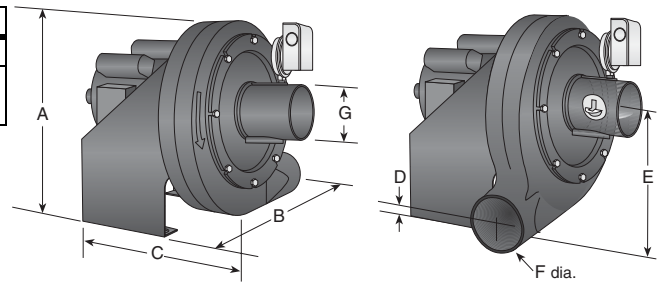


## SECTION 10: SPECIFICATIONS

## General Specifications

Pump Dimensional Data (in.)

Model	A	B	C	D	E	F	G
EP-201	17.75	17	20.25	3.25	10	4.5	4.5
EP-203							



## Pump Specifications

Model	EP-201	EP-203
Horsepower (Hp)	3/4	3/4
Phase (Ø)	1	3
Hertz (Hz)	60	60
Voltage (V)	115/230	208 -230 / 460
Full Load Amp (A)	6.6/3.3	2.4 - 2.2 / 1.1
R.P.M.	3450	3450
Motor Frame	56	56
Motor Enclosure	TENV	TEFC
Noise Level @ 5' (DBA)	70	N/A
Inlet/Outlet (In.)	4.5/4.5	4.5/4.5
Weight (lbs.)	112	112



## SECTION 11: THE ROBERTS GORDON® EP-200 SERIES PUMP LIMITED WARRANTY

### ROBERTS-GORDON WILL PAY FOR:

Within 42 months from date of shipment from Roberts-Gordon, replacement parts will be provided free of charge for any part of the controller which fails due to a manufacturing or material defect.

Roberts-Gordon will require the part in question to be returned to the factory. Roberts-Gordon will, at its sole discretion, repair or replace after determining the nature of the defect and disposition of part in question.

ROBERTS GORDON® Replacement Parts are warranted for a period of 18 months from date of shipment from Roberts-Gordon or the remaining ROBERTS GORDON® EP-200 Series Pump warranty.

### ROBERTS-GORDON WILL NOT PAY FOR:

Service trips, service calls and labor charges.

Shipment of replacement parts.

Claims where the total price of the goods have not been paid.

Damage due to:

- Improper installation, operation or maintenance.
- Misuse, abuse, neglect, or modification of the ROBERTS GORDON® EP-200 Series Pump in any way.
- Use of the ROBERTS GORDON® EP-200 Series Pump for other than its intended purpose.
- Incorrect gas or electrical supply, accident, fire, floods, acts of God, war, terrorism, or other casualty.
- Improper service, use of replacement parts or accessories not specified by Roberts-Gordon.
- Failure to install or maintain the ROBERTS GORDON® EP-200 Series Pump as directed in the Installation, Operation and Service manual.
- Relocation of the ROBERTS GORDON® EP-200 Series Pump after initial installation
- The use of the ROBERTS GORDON® EP-200 Series Pump in a corrosive atmosphere containing contaminants.
- The use of the ROBERTS GORDON® EP-200 Series Pump in the vicinity of a combustible or explosive material.
- Any defect in the ROBERTS GORDON® EP-200 Series Pump arising from a drawing, design, or specification supplied by or on behalf of the consumer.
- Damage incurred during shipment. Claim must be filed with carrier.

### WARRANTY IS VOID IF:

The ROBERTS GORDON® EP-200 Series Pump is not installed by a contractor qualified in the installation and service of gas-fired heating equipment.

You cannot prove original purchase date and required annual maintenance history.

The data plate and/or serial number are removed, defaced, modified or altered in any way.

The ownership of the ROBERTS GORDON® EP-200 Series Pump is moved or transferred. This warranty is nontransferable.

Roberts-Gordon is not permitted to inspect the damaged controller and/or component parts.

### READ YOUR INSTALLATION, OPERATION AND SERVICE MANUAL

If you have questions about your controller, contact your installing professional. Should you need Replacement Parts or have additional questions, call or write Roberts-Gordon:

#### U.S.A.

1250 William Street  
P.O. Box 44  
Buffalo, New York 14240-0044  
716.852.4400

#### Canada

76 Main Street West, Unit 10  
Grimsby, Ontario L3M 1R6  
905.945.5403

**On the web at:** [www.rg-inc.com](http://www.rg-inc.com)

**Roberts-Gordon's liability, and your exclusive remedy, under this warranty or any implied warranty (including the implied warranties of merchantability and fitness for a particular purpose) is limited to providing replacement parts during the term of this warranty.**

Some jurisdictions do not allow limitations on how long an implied warranty lasts, so this limitation may not apply to you. There are no rights, warranties or conditions, expressed or implied, statutory or otherwise, other than those contained in this warranty.

**Roberts-Gordon shall in no event be responsible for incidental or consequential damages or incur liability for damages in excess of the amount paid by you for the ROBERTS GORDON® EP-200 Series Pump.** Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from jurisdiction to jurisdiction.

Roberts-Gordon shall not be responsible for failure to perform under the terms of this warranty if caused by circumstances out of its control, including but not limited to war, fire, flood, strike, government or court orders, acts of God, terrorism, unavailability of supplies, parts or power. No person is authorized to assume for Roberts-Gordon any other warranty, obligation or liability.

### LIMITATIONS ON AUTHORITY OF REPRESENTATIVES:

No representative of Roberts-Gordon, other than an Executive Officer, has authority to change or extend these provisions. Changes or extensions shall be binding only if confirmed in writing by Roberts-Gordon's duly authorized Executive Officer.

